

CAPM. Mutual Funds: Introduction, classification of mutual fund schemes by structure and objective, advantages and disadvantages of investing through mutual funds. Performance Evaluation of Managed Funds using Sharpe's, Treynor's and Jensen's measures.

**Essential/recommended Readings (latest edition of readings to be used)**

1. Reilly, F. K. & Brown, K.C. (2012) *Analysis of Investments and Management of Portfolios*, (12th edition), Cengage India Pvt. Ltd.
2. Singh, Rohini (2017): *Security Analysis and Portfolio Management*, (2nd Edition). Excel Books.

**Suggestive Readings (latest edition of readings to be used)**

1. Fischer, D.E. & Jordan, R.J. (2006) *Security Analysis & Portfolio Management*, (6th edition), Pearson Education.
2. Ranganathan, M., & Madhumathi, R. (2006). *Investment Analysis and Portfolio Management*. Pearson Education.

**Note:** Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

**DISCIPLINE SPECIFIC ELECTIVE – FINANCE (DSE-8)**

**DSE 8: DIGITAL FINANCE**

**Credit distribution, Eligibility and Pre-requisites of the Course**

| Course title & Code     | Credits | Credit distribution of the course |          |                        | eligibility criteria | Pre-requisite of the course |
|-------------------------|---------|-----------------------------------|----------|------------------------|----------------------|-----------------------------|
|                         |         | Lecture                           | Tutorial | Practical/<br>Practice |                      |                             |
| Digital Finance (DSE 8) | 4       | 3                                 | 1        | 0                      | Class XII            | Basics of Finance           |

**Learning Objectives**

- To familiarize learners with the fundamentals of digital finance
- To develop awareness about varied kinds of payments system
- To learn about the emergence of cryptocurrency and blockchain
- To learn about the opportunities, challenges and risk management in fintech business

**Learning Outcomes**

On successful completion of the course the learner will be able to:

- Understand the nature of the digital revolution in finance

- Develop an insight about the emergence of digital business models, products and services in the ecosystem
- Develop an insight about the functioning of crypto asset and blockchain
- Analyze the key areas of concern in the operation of fintech business models

## **SYLLABUS OF DSE 8**

### **Unit 1: Digital Transformation of Finance**

**(11 Hours)**

A Brief History of Financial Innovation, Digitization of Financial Services, Introduction to FinTech & Funds, FinTech Transformation, FinTech Typology, Collaboration between Financial Institutions and Start-ups. Introduction to Regulation and future of RegTech.

Crowdfunding – Types and functioning of crowdfunding markets, Differences between traditional funding models and crowdfunding markets, Informational problems in the crowdfunding model.

### **Unit 2: Payment Systems**

**(11 Hours)**

Digitalization of the payment system, The historical evolution of the payment system. Attributes of a well-functioning payment system, Banks as guarantors of the payment system. New entrants and new payment models: risks for the banking system. FinTech applications in Banking & Non-Banking Financial Companies (NBFCs); Insurance; Payments; Lending; Audit; and Compliance. Electronic Clearing Service (ECS), Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Unified Payments Interface (UPI), Growth of Digital Payments in India, RBI guidelines on Digital Payments.

### **Unit 3: Crypto Assets and Blockchains**

**(12 Hours)**

Introduction: Crypto an asset for trade and Crypto-currency, Problems with issuers credibility, Fin Tech & Securities Trading; Cryptocurrencies and its future as currency, blockchain as a registration mechanism, Functioning of the block chain system. The integration of digital currency and blockchain and issuers incentive problems; PropTech: FinTech of Real Estate; Possible alternative uses of blockchain technology in the economy and difficulties in its implementation. Use of bitcoin in money laundering. The regulatory debate. Introduction of Central Bank Digital Currency (CBDC). Other Emerging Financial Technologies: Internet of things (IOT) & AR/VR applications.

### **Unit 4: FinTech, Big Data Analytics and New Financial Business Models**

**(11 Hour)**

The use of data in traditional credit decisions, the combination of big data and machine learning to improve financing decisions. Smart accounts, customized financial products, risk management and fraud prevention. High frequency trading: opportunities and risks. Digital security, Challenge of confidentiality, integrity and availability. Digital securities as systemic risk in economy. Regulations on cybersecurity. Latest developments in field of Digital Finance.

### **Essential/ recommended Readings (latest edition of readings to be used)**

1. Lynn, T., Mooney, J. G., Rosati, P., & Cummins, M. (2019). Disrupting finance: FinTech and strategy in the 21st century. New Delhi: Springer Nature.

2. Beaumont, P. H. (2019). Digital Finance: Big Data, Start-ups, and the Future of Financial Services. New Delhi: Routledge.

**Additional Readings (latest edition of readings to be used)**

1. RBI Guidelines on Payment Systems, Crypto Asset and Fintech Business Model
2. Phadke, S. (2020). FinTech Future: The Digital DNA of Finance. New Delhi: Sage Publications.
3. Maese, V. A., Avery, A. W., Naftalis, B. A., Wink, S. P., & Valdez, Y. D. (2016). Cryptocurrency: A primer.

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